

What is claimed is:

1. A garment for measuring biological information formed of a nonconductive material having elasticity so as to fit on the upper body of an examinee,

the garment being characterized in having a respiratory information measuring sensor, including a conductive member varying its electric resistance according to variation of constitution of the examinee through breathing thereof under a turning-on-electricity state and capable of delivering electric information based on the variation of electric potential to a respiratory information analysis device.

2. The garment for measuring biological information according to claim 1,

wherein the respiratory information measuring sensor is disposed at least on one of a perimeter of the chest and a perimeter of abdominal in the garment, and wherein electric resistance of the respiratory information measuring sensor varies with expansion and contraction of one of the length and cross-section of the conductive member in response to the examinee's breathing.

3. The biological information measuring garment according to one of claims 1 and 2,

wherein for the respiratory information measuring sensor, electric influence under a turning-on-electricity state to the examinee is decreased by covering a surface of the conductive member facing the body surface of the examinee and an opposed surface thereof with a nonconductive material.

4. The biological information measuring garment according to any one of claims 1 through 3,

wherein the conductive member of the respiratory information measuring sensors is arranged at a plural positions at least including one

of a position winding around vicinity of chest of the examinee and a position winding around vicinity of abdominal of the examinee.

5. A biological information measurement system comprising the garment according to any one of claims 1 through 4 and a respiratory information analysis device, the respiratory information analysis device comprising;

electric information acquisition means for acquiring information on electricity delivered from the respiratory information measuring sensors;

electric information comparison means for comparing a plurality of the acquired electric information;

electric information selection means for selecting the respiratory information measuring sensors detecting a larger amplitude as electric potential information to be based on an output of respiratory information in accordance with the comparison result of the electric information comparison means;

respiratory information analysis means for judging a variation cycle of the electric information detected with the respiratory information measuring sensors selected by the electric information selection means and analyzing respiratory information in accordance with the variation cycle; and

respiratory information output means for outputting respiratory information data in accordance with the analyzed respiratory information.

25

6. A respiratory information analysis device comprising:

electric information acquisition means for acquiring electrical information delivered from a plurality of respiratory information measuring sensors arranged on a garment for measuring biological information;

30

electric information comparison means for comparing a plurality of amplitudes of the acquired electric information;

electric information selection means for selecting the respiratory

information measuring sensors detecting a larger amplitude as electric information to be based on an output of respiratory information in accordance with the comparison result of the electric information comparison means;

5           respiratory information analysis means for judging a variation cycle of the electric information detected with the respiratory information measuring sensors selected by the electric information selection means and analyzing respiratory information in accordance with the variation cycle; and

10          respiratory information output means for outputting respiratory information data in accordance with the analyzed respiratory information.

7. A computer readable program for performing a computer as a cardiogram analysis device, the program is operated by the computer as:

15          electric information acquisition means for acquiring electric information delivered from a plurality of respiratory information measuring sensors arranged on a garment for measuring biological information, the acquisition means including a conductive material varying its electric resistance according to variation of constitution of the  
20   examinee through breathing thereof under a turning-on-electricity state and capable of acquiring electric information based on the variation of electric potential and capable of delivering the information to a respiratory information analysis device;

            electric information comparison means for comparing a plurality of  
25   the acquired electric information;

            electric information selection means for selecting the respiratory information measuring sensors detecting a larger amplitude as electric information to be based on an output of respiratory information in accordance with the comparison result of the electric information  
30   comparison means;

            respiratory information analysis means for judging a variation cycle of the electric information detected with the respiratory information measuring sensors selected by the electric information selection means

and analyzing respiratory information in accordance with the variation cycle; and

respiratory information output means for outputting respiratory information data in accordance with the analyzed respiratory information.

5

8. The respiratory information analysis system, the respiratory information analysis device or the program according to any one of claims 5 through 7,

wherein the respiratory information analysis means further  
 10 acquires information on a variation cycle of the electric information and information on an R-wave height cycle related to a variation cycle of R-wave height information of cardiogram based on electric potentials acquired from a cardiogram electrode and selects cycle information of either one and analyzes respiratory information in accordance with the  
 15 selected cycle information.

9. The respiratory information analysis system, the respiratory information analysis device or the program according to claim 8,

wherein the respiratory information analysis means further  
 20 acquires information on amplitude of the electric information and information on R-wave height amplitude related to amplitude of the R-wave height information and selects one of the electric information and the R-wave height information in accordance with comparison of the electric information and the R-wave height information and analyzes  
 25 respiratory information in accordance with the selected cycle information.

10. The respiratory information analysis system, the respiratory information analysis device or the program according to one of claims 8 and 9,

30 wherein further the respiratory information analysis means display one of a position of the cardiogram electrode and a position of the respiratory information measuring sensor detecting the selected information correspondingly with one of a diagram of the biological

information measuring garment and a diagram of the examinee's body.

11. A method of controlling a respiratory information analysis device comprising the steps of:

- 5        acquiring electric information delivered from a plurality of respiratory information measuring sensors capable of acquiring electric information based on the variation of electric potential, the sensor including a conductive material varying its electric resistance according to variation of constitution of an examinee through breathing thereof under a
  - 10      turning-on-electricity state;
  - comparing a plurality of amplitudes of the acquired electric potential information;
  - selecting the respiratory information measuring sensors detecting a larger amplitude as electric information to be based on an output of
    - 15      respiratory information in accordance with the comparison result; and
    - outputting respiratory information data in accordance with the analyzed respiratory information